

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P308755

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-CP125-W2A-U-3500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P308755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-34HE-UNV-L82765-CP125-W2A-U-3500K
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2954.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

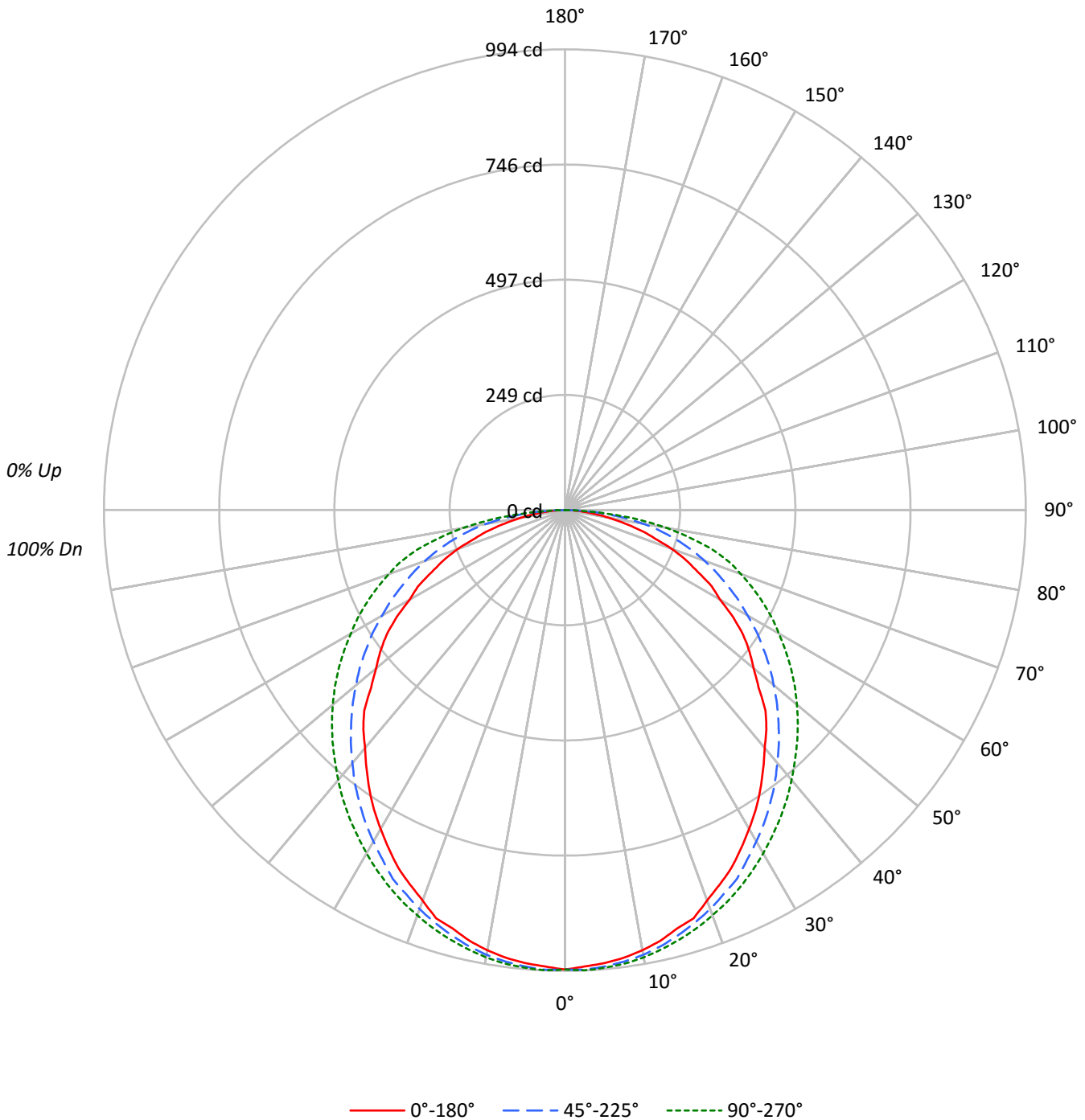
Input Watts (W): 27.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2667	2667	2667
5°	2650	2670	2677
10°	2635	2662	2677
15°	2603	2643	2671
20°	2567	2624	2664
25°	2527	2607	2662
30°	2469	2566	2658
35°	2415	2536	2661
40°	2354	2503	2672
45°	2330	2481	2696
50°	2226	2462	2735
55°	2202	2454	2792
60°	2077	2450	2869
65°	2017	2467	2998
70°	1936	2525	3182
75°	1764	2601	3425
80°	1512	2695	3462
85°	1223	2575	2967



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.8	3.2
10°-20°	267.5	9.1
20°-30°	402.7	13.6
30°-40°	483.3	16.4
40°-50°	505.1	17.1
50°-60°	470.7	15.9
60°-70°	386.1	13.1
70°-80°	260.1	8.8
80°-90°	84.7	2.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	764.0	25.9
0°-40°	1247.2	42.2
0°-60°	2223.1	75.3
0°-90°	2954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2954.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	981	984	988	990	991	93
15°	934	940	949	957	959	264
25°	851	857	878	891	896	391
35°	735	745	772	799	810	460
45°	612	616	652	691	708	468
55°	469	478	523	573	595	416
65°	317	331	387	444	471	315
75°	170	188	250	307	329	178
85°	40	57	83	98	96	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.1	991.1	991.1	991.1	991.1
2.5°	985.4	988.3	992.5	993.9	993.9
5°	981.2	984.0	988.3	989.7	991.1
7.5°	974.1	977.0	982.6	985.4	986.9
10°	964.2	967.1	974.1	978.4	979.8
12.5°	951.5	954.3	962.8	968.5	969.9
15°	934.5	940.2	948.7	957.2	958.6
17.5°	923.2	921.8	933.1	943.0	945.8
20°	896.4	903.4	916.2	927.5	930.3
22.5°	873.7	879.4	896.4	909.1	914.7
25°	851.1	856.8	878.0	890.7	896.4
27.5°	822.8	831.3	851.1	869.5	876.6
30°	794.6	803.1	825.7	846.9	855.4
32.5°	766.3	776.2	800.2	822.8	832.7
35°	735.2	745.1	771.9	798.8	810.1
37.5°	702.7	715.4	743.7	773.4	786.1
40°	670.2	682.9	712.6	746.5	760.6
42.5°	643.3	648.9	682.9	719.6	733.8
45°	612.2	616.4	651.8	691.4	708.3
47.5°	566.9	582.5	620.7	664.5	681.5
50°	531.6	548.6	588.2	634.8	653.2
52.5°	501.9	513.2	557.0	603.7	624.9
55°	469.4	477.9	523.1	572.6	595.2
57.5°	429.8	445.4	490.6	541.5	564.1
60°	386.0	405.8	455.3	510.4	533.0
62.5°	357.7	369.0	422.7	477.9	503.3
65°	316.7	330.8	387.4	443.9	470.8
67.5°	282.8	296.9	354.9	411.4	438.3
70°	246.0	260.1	320.9	377.5	404.4
72.5°	203.6	223.4	287.0	343.6	371.8
75°	169.7	188.0	250.2	306.8	329.4
77.5°	131.5	155.5	213.5	260.1	277.1
80°	97.6	121.6	173.9	207.8	223.4
82.5°	66.4	90.5	130.1	155.5	164.0
85°	39.6	56.6	83.4	97.6	96.1
87.5°	18.4	24.0	33.9	33.9	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)